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PATENT

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In re patent application of:

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Serial No.: **Not Yet Assigned**

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For: **LASER IMAGE PRINTING PLATES**

EXPRESS MAIL LABEL NO: EL531449950US

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Assistant Commissioner for Patents
Washington, DC 20231

PRELIMINARY AMENDMENT

Prior to examination, please amend the above-identified patent application as follows.

IN THE CLAIMS

Please cancel claims 1 to 9 without prejudice.

Please add the following new claims.

10. A method of making a laser imaged printing plate, the steps comprising


- (a) providing a solid, uncured, photocurable printing plate comprising:
- 1) a backing;
 - 2) a photocurable layer on said backing having a low absorbance of radiation at a selected wavelength in the range of 300-400 nm and an initiator activatable at the selected wavelength; and;
 - 3) an ultra-violet radiation absorbing layer over said photocurable layer, said absorbing layer comprising a polymeric matrix and a dopant having a high extinction coefficient in the wavelength range of 300-400 nm, wherein said ultra-violet radiation absorbing layer is capable of being photoablated by a laser operating at a first energy level in the wavelength of 300-400 nm, and wherein unablated areas of said absorbing layer are capable of absorbing substantially all irradiated light in the wavelength range of 300-400 nm from an ultra-violet light source operating at a second energy level lower than said first energy level;
- (b) photoablating said absorbing layer using a laser, thereby providing ablated and unablated areas forming an image;
- (c) flood exposing said laser imaged printing plate to UV light in the wavelength of 300-400 nm, without a negative, thereby curing the photocurable layer in areas under ablated areas of said absorbing layer; and
- (d) developing said exposed, laser-imaged plate.

11. The method of claim 10 wherein the dopant is 2,2',4,4'-tetrahydroxybenzophenone; 2,2'-dihydroxy-4,4'-dimethoxybenzophenone; or mixtures thereof.
12. The method of claim 10 wherein unablated areas of said absorbing layer are capable of absorbing at least 97% of irradiated ultra-violet light in the range of 300-400 nm at said second energy level.
13. The method of claim 10 wherein the uncured printing plate further comprises a photocurable overcoat layer disposed between said photocurable layer and said radiation absorbing layer, said overcoat layer having a low absorbance of radiation at the selected wavelength and an initiator activatable at the selected wavelength.
14. The method of claim 12 wherein the uncured printing plate further comprises a photocurable overcoat layer disposed between said photocurable layer and said radiation absorbing layer, said overcoat layer having a low absorbance of radiation at the selected wavelength and an initiator activatable at the selected wavelength.

Conclusion

Applicants submit that the claims are in condition for allowance, and an early Office Action to that effect is earnestly solicited.

Respectfully submitted,



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